Recent Advances in Fractional Order Control System: A Review

Roopam Shrivastav[1], Prashant Garg[2], Narottam Dutt Upadhyay[3]

Research Scholar, Department of Electrical Engineering[1]

Assistant Professor, Department of Electrical Engineering[2,3]

Vikrant Institute of Technology & Management, Gwalior, India

Abstract: *Several papers reviewing fractional order calculus in control applications have been published recently. These papers focus on general tuning procedures, especially for the fractional order proportional integral derivative controller. However, not all these tuning procedures are applicable to all kinds of processes, such as the delicate time delay systems. This motivates the need for synthesizing fractional order control applications, problems, and advances completely dedicated to time delay processes. The purpose of this paper is to provide a state of the art that can be easily used as a basis to familiarize oneself with fractional order tuning strategies targeted for time delayed processes. Solely, the most recent advances, dating from the last decade, are included in this review.*

Keywords: Fractional calculus, time delay process, fractional order control..

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